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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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04/09/2004

Ho-jin Ha

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EXAMINER

FLANDERS, ANDREW C

ART UNIT

PAPER NUMBER

2615

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/820,821	Applicant(s) HA, HO-JIN	
	Examiner ANDREW C. FLANDERS	Art Unit 2615	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 April 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 April 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>3/10/05, 4/9/04</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 5 and 13 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 5 and 13 contain the trademark/trade name DOS. Where a trademark or trade name is used in a claim as a limitation to identify or describe a particular material or product, the claim does not comply with the requirements of 35 U.S.C. 112, second paragraph. See *Ex parte Simpson*, 218 USPQ 1020 (Bd. App. 1982). The claim scope is uncertain since the trademark or trade name cannot be used properly to identify any particular material or product. A trademark or trade name is used to identify a source of goods, and not the goods themselves. Thus, a trademark or trade name does not identify or describe the goods associated with the trademark or trade name. In the present case, the trademark/trade name is used to identify/describe a specific brand of operating system and, accordingly, the identification/description is indefinite.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 9 and 17 – 20 are rejected under 35 U.S.C. 102(b) as being anticipated by Yoshiaki (JP 20011344419, Machine translation relied upon and included in this mailing).

Regarding **Claims 1, 9 and 17 - 20**, Yoshiaki discloses:

A computer system having a microphone inputting a sound signal (2) and a storage unit storing data (storage means; para 18), comprising:

a selection part outputting a sound recording selection signal (i.e. computer controls, specifically the recording button 3 and reproduction button 4; para 17);

a signal processing part processing the sound signal input through the microphone (sound controller chip 10);

a recording control part (control section 15) managing the input sound signal to be processed by the signal processing part, in response to the sound recording selection signal from the selection part and storing the processed sound data in the storage unit (control section 15 records in response to the depression signal; para 18);
and

a power supply part (13) supplying power only to sound recording system components including the microphone, the storage unit, the signal processing part, and the recording control part, when the selection part outputs the sound recording selection signal and power is not supplied to the computer system (power supply 13 provides exclusive power to the recording portion of the computer so that the user is not required to power up the pc completely in order to record; para 19; can also be performed with the computer completely powered on).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2, 6 – 8, 10, 12 and 14 – 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yoshiaki (JP 20011344419) in view of Brainard (U.S. Patent 6,076,133)

Regarding **Claim 2**, in addition to the elements stated above regarding claim 1, Yoshiaki fails to explicitly disclose the limitations of claim 2. However, Yoshiaki does disclose buttons for controlling a recording and reproduction function in a computer

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system. It is notoriously well known in the art to control a computer system using interrupts for user actuated buttons. While, not explicitly disclosed it is likely that Yoshiaki invention does use interrupts.

In a similar field of endeavor (buttons on a computer system for recording playback), Brainard discloses a computer interface with a hardware button array that uses interrupts to signal a computer system that a button has been pressed.

Applying the interrupt functionality of Brainard to the controls of Yoshiaki discloses:

further comprising an interrupt generating part generating an interrupt signal (i.e. generating an interrupt using ASIC 250; col. 9 lines 35 - 40), in response to the sound recording selection signal of the selection part (depression of button in Yoshiaki as modified by Brainard); and

wherein the recording control part comprises:

an interrupt processing routine processing the interrupt signal from the interrupt generating part (system performs the functionality of the depressed button; summary of Brainard), and a sound recording program called by the interrupt processing routine (sound program inherent, software necessary for Yoshiaki to function).

It would have been obvious to one of ordinary skill in the art at the time of the invention to apply the interrupt processing of the depressed buttons of Brainard to the depressable buttons of Yoshiaki. One would have been motivated to do so to create a computer with increased capabilities with a user friendly interface to facilitate ease of

use as much as possible which would quickly respond to user commands; para 3
Brainard.

Regarding **Claim 6**, in addition to the elements stated above regarding claim 2,
the combination further discloses:

a pre-determined driver based on an operating system, and a random access
memory (RAM) resident sound recording program called by the driver in response to the
sound recording selection signal of the selection part after the computer system boots
up (the processor of Brainard notifies the appropriate OS driver to execute the desired
function of the depressed button as applied to Yoshiaki. This functionality is either
playback or recording, with inherently has software stored within the storage devices of
Yoshiaki; Fig. 4 and description).

Regarding **Claim 7**, in addition to the elements stated above regarding claim 6,
the combination further discloses:

wherein the driver interfaces with the RAM-resident sound recording program via
an application programming interface (the program driver interfaces with the OS as
shown in Fig. 4 and its description).

Regarding **Claim 8**, in addition to the elements stated above regarding claim 6,
the combination further discloses:

wherein the RAM-resident sound recording program presents a user interface to select replaying the stored sound data in the storage unit, and the RAM-resident sound recording program reads the stored sound data from the storage unit, if replay is selected through the user interface, and controls the signal processing part to process the read sound data and output the processed sound data through a speaker (i.e. playback of the stored recordings in Yoshiaki using the reproduction button, output and sound controller chip. The software for performing the playback is inherently stored in one of the storage areas).

Claims 10, 12 and 14 – 16 claims the same limitations as the claims above and is rejected under the same grounds.

Claims 3 – 5, 11 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yoshiaki (JP 20011344419) in view of Brainard (U.S. Patent 6,076,133) and in further view of Jacobs (U.S. Patent 6,006,285).

Regarding **Claim 3**, in addition to the elements stated above regarding claim 2, the combination further discloses:

wherein the sound recording program is disposed either in a (the) BIOS ROM or the storage unit (inherent, operational programs/software for the recording device must be stored in a storage unit or storage device).

The combination fails to explicitly disclose a BIOS ROM storing the interrupt processing routine. However, most, if not all modern computer systems include a BIOS ROM. While not explicitly disclosed it is likely that Yoshiaki includes this functionality.

In a similar field of endeavor (audio functionality separate from the fully functioning computer) Jacobs discloses a computer with an audio device that operates separately from the main computer system and stores various program portions in a BIOS.

Applying Jacobs to the combination further discloses a BIOS ROM storing the interrupt processing routine (storing the interrupt routine of the combination into Jacob's BIOS in the same manner as Jacob's stores the software in cols. 1 and 2).

It would have been obvious to modify the combination to store various program portions in the BIOS. Computer systems typically include BIOS routines for setting up hardware and other devices/program modules upon booting. Modifying the combination to include this functionality would provide for a separate operating mode (i.e. recording mode) without the need for having to boot up the entire PC much like the system of Jacobs.

Regarding **Claim 4**, in addition to the elements stated above regarding claim 2, the combination further discloses:

the interrupt processing routine calls the sound recording program to be executed, in response to the sound recording selection signal of the selection part when

the power is not supplied to the computer system (i.e. depressing the record button 3 of Yoshiaki to generate interrupts like the depressed buttons in Brainard).

The combination fails to explicitly disclose a BIOS ROM storing the interrupt processing routine. However, most, if not all modern computer systems include a BIOS ROM. While not explicitly disclosed it is likely that Yoshiaki includes this functionality.

In a similar field of endeavor (audio functionality separate from the fully functioning computer) Jacobs discloses a computer with an audio device that operates separately from the main computer system and stores various program portions in a BIOS.

Applying Jacobs to the combination further discloses a BIOS ROM storing the interrupt processing routine (storing the interrupt routine of the combination into Jacob's BIOS in the same manner as Jacob's stores the software in cols. 1 and 2).

It would have been obvious to modify the combination to store various program portions in the BIOS. Computer systems typically include BIOS routines for setting up hardware and other devices/program modules upon booting. Modifying the combination to include this functionality would provide for a separate operating mode (i.e. recording mode) without the need for having to boot up the entire PC much like the system of Jacobs.

Regarding **Claim 5**, in addition to the elements stated above regarding claim 4, the combination further discloses:

wherein the sound recording program executes under control of disc operating system (DOS) (MS DOS, or any other of the various DOS OS's which operate under a windows based GUI OS; Brainard).

Claims 11 and 13 claims the same limitations as the claims above and is rejected under the same grounds.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Watanabe (U.S. 6,763,458) discloses a system functioning separately from main computer system.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ANDREW C. FLANDERS whose telephone number is (571)272-7516. The examiner can normally be reached on M-F 8:30 - 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sinh Tran can be reached on (571) 272-7546. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Acf/

/Sinh N Tran/
Supervisory Patent Examiner, Art Unit 2615